United States Department of the Interior

FISH AND WILDLIFE SERVICE
BLOOMINGTON FIELD OFFICE (ES)
620 South Walker Street
Bloomington, Indiana 47403-2121
(812) 334-4261 FAX 334-4273

IN REPLY REFER TO:

May 28, 1997

Ms. Sheri Bianchin (HR-6J)
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60605

Dear Ms. Bianchin:

This constitutes our comments on the February 1997 "Technical Memorandum Phase II Wetland Investigation for the American Chemical Service NPL Site, Griffith, Indiana." Additional comments related to our May 9, 1997 site visit are also provided.

This letter has been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and is consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U.S. Fish and Wildlife Service's Mitigation Policy.

Proposed PCB Clean-up Criteria

The Fish and Wildlife Service (FWS) does not concur that 10 ppm in wetland sediments is protective of fish and wildlife resources. A clean-up goal of 1 ppm is feasible and appropriate and has been utilized for other sites with similar habitat. It should be pointed out however, that even 1 ppm is higher than literature-based adverse effect levels. For example, Persaud et al. (1993) presents a Lowest Effect Level (LEL) for PCBs as 0.070 ppm. Long and Morgan (1990) reported an Effects Range-Low (ERL) as 0.050 ppm, an Effects Range-Median (ERM) at 0.40 ppm, and an Apparent Effects Threshold (AET) of 0.37 ppm. EPA, in its January 1996 issue of "ECO Update" listed a sediment ERL as 0.023 ppm, citing Long et al. (1995).

The manner in which mink was used to provide a rationale for estimating "a biologically significant area of PCB affected sediment" is flawed. Use of a 640 acre home range for mink is inaccurate. While this may be an appropriate home range estimate in the prairie pothole region of North Dakota (as cited in Allen 1986), a more appropriate home range is estimated to be less than 20 acres (Marshall 1936, Mitchell 1961). However, to be protective of sensitive avian receptors, such as red-winged black birds or marsh wrens, defended nesting territories (i.e. home range) and subsequent foraging activities will often occur within an acre or less. We recommend that this document provide an appropriate risk assessment with supporting documentation or remove this information on risk management from this document.

Groundwater Diffuser Location Relative to Highest PCB Contamination

It appears as if the installation of the groundwater diffuser, particularly the southern-most arm, is located in the area of highest PCB contamination. We strongly recommend that groundwater not be discharged in this area until after sediment remediation has occurred in order to prevent additional downstream releases of PCBs.

Additional Sampling Needs

As discussed in our meeting on May 9, 1997, we encourage some additional sampling for PCBs in order to confirm the downstream most extent of PCBs in the wetland adjacent to the ACS site, and downstream of the railroad culvert. The "upstream 1 and 2" locations are, in fact, downstream of the groundwater pumped out of the City Landfill pit. Groundwater data for the ACS site acknowledges that this pumping of groundwater historically effected local groundwater dynamics for the site. Because of this, these samples really do not constitute upstream samples and really do not assist in determining fate and extent of contamination. The PCBs in the wetlands likely arrived there at least 20 years ago, and it is likely that some downstream migration had occurred. Given historic data on ambient water quality criteria exceedances for this wetland (data generated for the site in the Remedial Investigation), it is clear that PCBs have had an influence over much of this wetland. The other 2 samples taken downstream of the railroad culvert, referred to as "outfall" and "downstream," were taken in an area of relatively high water scouring and are not definitive.

Sediment samples collected with the core auger did experience some significant compaction. The 0 to 6" portion of these samples may, in fact, represent much more than the first 6" of sediment. If only the surficial sediments are contaminated, this could bias the sample results by reducing the reported concentrations significantly. At the downstream end of the PCB contaminant plume (sediment sample areas encompassed by A2-A4 through C2-C4), there is a concern that surface contamination above biological concern levels (0.37 ppm) might not have been observed due to the dilution caused by compaction.

Wetland Regulatory Issues

In the Draft Feasibility Study dated April 1991 completed by Warzyn identified Section 404 of the Clean Water Act as an "All Relevant and Appropriate Requirement" (ARAR) in Table 3-2. Given the wetland delineation and investigation that EPA funded FWS to do for this site, we are certain that this ARAR carried over into the final Feasibility Study and Record of Decision (ROD). It is unfortunate, however, that this did not translate to on-the-ground implementation of this ARAR during construction of the remedy. We learned during our May 9, 1997 site visit that this ARAR has been totally neglected. It is EPA's responsibility to insure that the RP is meeting the intent of Section 404, and given the amount of habitat impacts occurring unmitigated at the site, it is clear that this has not been done.

Natural Resource Trustee Issues

FWS, on behalf of the Department of the Interior, remains concerned about continuing natural resource impacts at this site. The extent and concentrations of residual PCB contamination found in the wetland are more extensive than when the natural resource trustees first participated in settlement negotiations. The wetland impacts associated with implementation appear to also be more extensive than the

trustees had originally considered. More information regarding the extent of off-site migration of contaminants is also available, but it appears more work will be needed to fully characterize this.

We look forward to continued coordination of trustee and EPA efforts on the ACS site. As you know, we are especially interested in any future remedial decisions for the adjacent wetlands operable unit so that the trustees can take appropriate future action. If you have any questions regarding these comments, or require further technical assistance, please contact Dan Sparks of my staff at (812) 334-4261, extension 219.

Sincerely Yours,

Daniel W. Sparks, acting

for David C. Hudak
Supervisor

cc: U.S. EPA Region V, Chicago, IL (J. Chapman) (HSRLT-5J)
IDNR, Division of Fish & Wildlife, Indianapolis, IN (W. Faatz)
IDNR, Division of Fish & Wildlife, Indianapolis, IN (M.A. Habeeb)
IDEM, Office of Environmental Response Indianapolis, IN (J. Smith)
Office of the Field Solicitor, Twin Cities, MN (J. Sutton)
Myra Spicker, Office of the Attorney General, 402 W. Washington, 5th Floor, Indianapolis, IN
Greg Sukys, DOJ-EEB, Washington, DC
Barbara Magel, Karaganis & White, 414 N. Orleans Street, Chicago, IL 60610

References

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